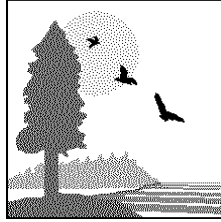

APPENDIX B.

**Notice of Preparation (NOP), Notice of Intent (NOI),
Comments on NOP/NOI With Index of EIR/EIS
Sections Addressing Comments**

CALIFORNIA STATE LANDS COMMISSION

100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202



PAUL D. THAYER, *Executive Officer*

(916) 574-1800 FAX (916) 574-1810

*California Relay Service From TDD Phone 1-800-735-2922
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Contact Phone: (916) 574-1868

Contact FAX: (916) 574-1885

**NOTICE OF PREPARATION OF
A DRAFT ENVIRONMENTAL IMPACT REPORT /
ENVIRONMENTAL IMPACT STATEMENT
AND
NOTICE OF PUBLIC SCOPING MEETINGS**

EIR/EIS No.: 731

File Ref: W30156; W25980

SCH No.: 2004051138

Date: May 25, 2004

To: Interested Parties

Project: Monterey Bay Submarine Cabled Observatory

Applicant: Monterey Bay Aquarium Research Institute

Location:

Project components / ancillary facilities would be installed within and upon the ocean floor within Monterey Bay and the Pacific Ocean offshore of Moss Landing, Monterey County, California.

Project Description:

The California State Lands Commission (CSLC) will be the Lead Agency under the California Environmental Quality Act (CEQA) and will jointly prepare an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the proposed project. The Monterey Bay National Marine Sanctuary (MBNMS) will serve as the federal lead agency for environmental review required by the National Environmental Policy Act (NEPA). The MBNMS will issue a separate Notice of Intent for the project.

The description, location, and potential environmental effects of the Project are discussed in more detail in the attached Scoping Document.

Purpose of Public Scoping Process:

The purpose of this Notice of Preparation and Notice of Public Scoping Meetings is to obtain agency and the public's view as to the scope and content of the environmental information and analysis that should be included in the EIR/EIS. Applicable federal, state, or local agencies will need to use the EIR/EIS when considering related permits or other approvals for the Project.

Due to the time limits mandated by State law, written comments must be sent by June 24, 2004. Please send your comments at the earliest possible date to Michelle Brown at the CSLC's address shown on this notice, by fax at (916) 574-1885, or by e-mail at brownm@slc.ca.gov (if comments are faxed, please also mail the original to ensure that a clean copy is received).

Pursuant to Section 15083, Title 14, California Code of Regulations (State CEQA Guidelines) and 40 CFR 1508.25 (Federal Guidelines), the CSLC and MBNMS will also conduct two public scoping meetings on the Project to receive oral testimony at the times and place listed below.

DATE: Wednesday, June 9, 2004

TIME: 4:00 p.m. and 6:30 p.m.

LOCATION: Moss Landing Marine Laboratory
8272 Moss Landing Road
Moss Landing, California

If you have any questions, please contact Michelle Brown at the above address, by calling (916) 574-1783, or by e-mail to brownm@slc.ca.gov. Copies of this Notice will also be available at the Public Scoping Meeting and on the CSLC's web page: <http://www.slc.ca.gov> (under the "Public Notices" category), and on the MBNMS's web page: <http://montereybay.noaa.gov>

Signature: _____ Date: _____

Michelle M. Brown
Environmental Scientist
Division of Environmental Planning and Management
California State Lands Commission

SCOPING DOCUMENT
Monterey Bay Aquarium Research Institute (MBARI)
Submarine Cabled Observatory
May 25, 2004

1.0 PROJECT DESCRIPTION

The Project proposes to install an advanced cabled observatory in Monterey Bay that will serve as the test bed for a state-of-the-art regional ocean observatory, currently one component of the National Science Foundation (NSF) Ocean Observatories Initiative (OOI). The Monterey Accelerated Research System (MARS) cabled observatory represents the next step toward harnessing the promise of new power and communication technologies to provide a remote, continuous, long-term, high-power, large-bandwidth infrastructure for multidisciplinary, *in situ* exploration, observation, and experimentation in the deep sea. MARS will serve as the engineering test bed for future cabled observatories, including the North-East Pacific Time Series Undersea Networked Experiments (NEPTUNE) Project, which is located off of the coast of Washington. NEPTUNE is a regional scale cabled observatory that the NSF plans to construct in 2006. MARS will provide an advance opportunity to look at the operations, management, outreach activities, and costs involved with NEPTUNE on a smaller scale, and allow adjustments where necessary.

MARS will be located in one science node on 51 kilometers (km) of submarine cable. The science node will provide 8 science ports, and each port will have a 100-Mbit-per-second, bi-directional telemetry channel. The node will have the ability to deliver a total of 10kW of power to the 8 ports. Extension cables can be plugged into any science port to provide power and communications up to 3.5 km away from the original node using the most cost effective deployment vehicle from several options including MBARI's remotely operated vehicles (ROVs) and ships of opportunity. The system will make use of the tools, techniques, and products developed over the last several decades for high reliability submarine telecommunication and military systems to ensure that this system can operate over a 25-year lifetime with minimum life-cycle cost.

The cable route extends from Moss Landing (Monterey Bay, California) towards the northwest, to the north of the Monterey Canyon, and along the continental margin to the southeastern part of the Smooth Ridge. The applicant proposes to bury the cable along most of the route to a depth of one meter, where feasible, using a hydraulically operated plow that is towed by a cable installation vessel. The plow would cut a narrow trench for the cable and bury the cable. In areas where the cable cannot be buried with this method, the cable would be laid on the sea bottom and would be post lay buried by jetting, where feasible. Some portions of the cable would remain unburied due to potentially hard seafloor substrate and exposed rocks.

In the near shore area, the cable would be installed in an existing pipeline that extends from 153 meters offshore to the proposed landing site located north of the Monterey Canyonhead in Moss Landing and owned by Duke Energy. Because the applicant is

proposing to use an existing pipeline, no trenching or boring is proposed in the near shore area.

The applicant has identified an alternative landing site on the southern side of the Monterey Canyonhead, which would involve routing the cable from the new Moss Landing Marine Laboratory pier northward to the junction with the proposed landing site. This alternative will be analyzed in the EIR/EIS.

The applicant anticipates the cable would operate for a minimum of 25 years. The scope of the EIS/EIR will address the entire project, including the onshore components and the offshore area to the end of the cable. The entire offshore area is located within the MBNMS.

1.1 Project Objectives/ Purpose and Discussion of Need

The goal of this Project is to design and install, in State and federal waters, an advanced cabled observatory in Monterey Bay that will provide a continuous monitoring presence in the Monterey Bay National Marine Sanctuary as well as serve as the test bed for a state-of-the-art regional ocean observatory, currently one component of the National Science Foundation Ocean Observatories Initiative. The test bed will provide real time communication and continuous power to suites of scientific instruments enabling monitoring of biologically sensitive benthic sites and allowing innovative scientific experiments to be performed. Specific project objectives are to:

- Test aspects of the regional cabled observatory (NEPTUNE) technology, both for the initial design of the system and during the lifetime of the project. New systems will be first tested on MARS in Monterey Bay on account of the year-round weather window for marine operations and the proximity to ships and remotely operated vehicles (ROVs) in Moss Landing. After successful testing on MARS, systems will be deployed on the more remote NEPTUNE observatory in the Pacific Northwest, where the weather window is seasonal and ROVs are infrequently available.
- Test methods for education and outreach in partnership with the Monterey Bay Aquarium, which enjoys a world-class reputation for its innovative programs in public education.
- Test deep-water ROV procedures that will later be used for installing and servicing instruments on NEPTUNE.
- Serve as an instrument test bed to verify the performance of new instrumentation under development prior to being deployed on NEPTUNE. These instruments will be entirely new designs offering advanced capabilities for oceanographic studies and will be developed at many different institutions across the US throughout the operational life of MARS.
- Provide power and high bandwidth real time communications to a broadband seismic observatory located on the west side of the San Gregorio fault line. This will provide a unique and important capability, providing real-time data to the

Berkeley Digital Seismic Network from the only seismometer located to the west of the fault line. The location of this seismometer will enable improvements in locating earthquake epicenters and in understanding fault mechanisms.

- Provide power and high bandwidth communications to instrumentation that will (a) allow long term *in situ* studies of chemosynthetic biological communities on Smooth Ridge, (b) be located in the active upper canyon enabling better understanding of canyon mass wasting events, (c) enable long term monitoring of spatial and temporal variability in parameters such as temperature and chlorophyll associated with phenomena such as El Niño that can significantly affect fishery stocks, and (d) enable studies of carbon transport from the region of primary production in the upper ocean to benthic communities.

1.2 Project Location

MARS would be located in Monterey Bay offshore the MBARI facilities at Moss Landing, Monterey County, California (Figure 1). MBARI indicates that Monterey Bay is needed for the Project because:

- Moss Landing is within easy year round access to deep water due to its location at the head of Monterey Canyon, and its mild climate. The MARS observatory must be located in deep water to test both the NEPTUNE technology and to develop the remotely operated vehicles (ROV) procedures needed to operate deep-water cabled observatories.
- MBARI has two ships equipped with ROVs berthed at Moss Landing, one of which is nearly always deployed as a day boat. These ROVs are the only ones located on the west coast of the US operated by an oceanographic institute.
- One of MBARI's joint projects with the Monterey Bay Aquarium, Education and Research: Testing Hypothesis (EARTH) provides wide public and educational benefits
- Smooth Ridge is located on the west side of the San Gregorio fault line, critical for seismic studies, and is close to several well established chemosynthetic biological communities. It is also provides a location that is within easy reach of the active upper section on Monterey Canyon.

1.3 Permits and Permitting Agencies

Federal, State, and local agencies that, in addition to the CSLC and MBNMS, may have approval or oversight over aspects of the proposed Project, include but are not limited to:

- National Oceanic and Atmospheric Administration (NOAA)
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- U.S. Environmental Protection Agency

- NOAA Fisheries – National Marine Fisheries Service
- California Coastal Commission
- State Water Resources Control Board
- California Department of Fish and Game
- California Department of Parks and Recreation Office of Historic Preservation
- California Public Utilities Commission
- Central Coast Regional Water Quality Control Board
- Moss Landing Harbor District
- Monterey Bay Unified Air Pollution Control District
- Monterey County Planning and Building Department

2.0 SCOPE OF EIR/EIS

Pursuant to the State CEQA Guidelines section 15060, the CSLC staff conducted a preliminary review of the Project. Based on the potential for significant impacts resulting from the Project, an EIR/EIS was deemed necessary. (A separate initial study will not be prepared as provided in the State CEQA Guidelines section 15060 (d).) A preliminary listing of issues to be discussed in the EIR/EIS is provided below. Additional issues may be identified at the public scoping meetings and in written comments. The EIR/EIS will also consider project alternatives, including the No Project / No Action Alternative, as required by the CEQA and the NEPA. Since a portion of the Project will occur in federal jurisdiction, the EIR/EIS will also address NEPA requirements.

2.1 Potentially Significant Impacts to be Addressed in the EIR/EIS

The installation, maintenance, and eventual decommissioning and removal of the cable and ancillary facilities pose potentially significant impacts to the physical environment. The EIR/EIS will address such environmental effects in the categories of cable construction, operation, maintenance and repair, and removal.

A preliminary listing of each of the areas in which potentially significant and insignificant impacts may occur is discussed below. We invite comments and suggestions regarding the following environmental issue areas or other issues that should be addressed.

2.1.1 Air Quality

The Monterey Bay Unified Air Pollution Control District has established air pollution thresholds against which a Project can be evaluated and assist lead agencies in determining whether or not the Project would produce significant impacts. If the thresholds are exceeded by a Project, the Project impacts should be considered significant. Impact criteria have been established and will be evaluated for short-term construction.

2.1.2 Commercial and Recreational Fishing

The Project may affect commercial and recreational fisheries and fishery operations, including, but not limited to, construction and operational interference with fishing activities (with accompanying potential loss of catch), potential accidents from fishing gear entanglement (with the cable or ancillary components), and long-term preemption of fishing grounds, in addition to potential benefits to resources from research results.

2.1.3 Cultural Resources

The potential exists for the Project to impact cultural resources, which may be buried along the proposed cable route. A cultural resources records search will be conducted for the entire project route and that of each alternative to determine the presence of documented and sensitive cultural resources.

2.1.4 Geology And Soils

One of the purposes of the Project is to obtain seismic data regarding the San Gregorio and Monterey Bay Fault Zones, which are the western-most components of the San Andreas system. Therefore, the potential exists for the proposed cable to be affected by ground shaking, ground failure, and liquefaction. The Project route will be evaluated for soil types, taxonomic classification and land capability classification. Topography will be described and analyzed. Expansive soils, stratigraphy and slopes, faults and seismicity, seismic structural safety, liquefaction potential, earthquake-induced inundation, settlement, subsidence, landslides, and volcanic hazards will be discussed and analyzed.

2.1.5 Marine Biological Resources

The Project may affect marine biological resources. The proposed cable route will be surveyed for characteristic habitats in the project region and for the existence of State and federal candidate or listed species, California Department of Fish and Game (CDFG) species of concern, and potential habitats. The potential exists for direct and indirect effects on sensitive species and habitats, such as those that may result from cable burial activities.

2.1.6 Marine Water Quality

The Project may affect marine water quality. During cable installation, the trenching has potential to affect turbidity and cause benthic disruption.

2.1.7 Noise

The proposed environmental analysis will determine whether the construction and activities associated with the operation of this cable would significantly increase the ambient noise levels for adjoining areas. The potential exists for the Project to expose people and wildlife to increased ambient noise levels from the use of vessels, heavy equipment, and generators during the construction period.

2.1.8 Environmental Justice

The proposed project may have the potential to cause disproportionate effects on minority and/or low-income populations within the project impact area. Such populations may include, but not be limited to, those in the local fishing industry.

2.1.9 Marine Vessel Traffic

The Project may affect marine vessel traffic. During cable installation, the trenching has potential to cause vessel interference with commercial and recreational vessel navigation.

2.1.10 Cable Strumming

The proposed project may have the potential to incur lateral movement of the cable along the seafloor, which may impact the marine environment.

2.2 No Impact/Less Than Significant Impacts

Based on preliminary review, CSLC staff has determined that the Project would have a less than significant impact or no impact on the CEQA issue areas identified below. The primary reasons for these preliminary determinations are as follows:

Aesthetics – The Project installation activities will be short term and will not involve significant above ground features, which would affect scenic resources or degrade the existing visual character of the site surroundings. No light or glare is anticipated which would adversely affect day or nighttime views in the area.

Mineral Resources – The Project does not preclude or involve significant extraction and removal of material that may be deemed to be a locally important mineral resource of value to the region and residents of the State.

Population and Housing – The Project is not anticipated to affect the long-term quality or rate of growth of population and housing in the region or short-term demand for new, temporary housing for construction workers. The project is located within or adjacent to existing urban areas which contain existing residential infrastructure for proposed construction workers.

Public Services – No additional public services are anticipated to be needed as a result of the Project.

2.3 Alternatives to be Addressed in the EIR/EIS

No Project/No-Action Alternative: The EIR/EIS will examine the impacts of not approving the Project.

Alternative Offshore Locations: The EIR/EIS will consider alternative routing locations in the vicinity of the Project within Monterey Bay and in proximity to the MBARI facilities.

Alternative Means of Obtaining Data: The EIR/EIS will examine the feasibility of utilizing buoys and other means to accomplish the Project objectives.